Grants Chlorinated Solvents

Plume Site (Cibola County) **Grants, New Mexico** **EPA REGION 6**

CONGRESSIONAL DISTRICT 02

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Last Updated: May 2012 pdates as of: July 2012



Background

The Grants Chlorinated Solvents Plume Site is located within the city limits of Grants, Cibola County, New Mexico. The source of contaminants is believed to be from an operating dry cleaner and an abandoned

dry cleaner. The contamination is believed to be present in a shallow aguifer underlying residential and commercial facilities within the city of Grants causing vapor intrusion in buildings above the plume. The wells for the city are located 2 miles north of the site and have not been impacted by the plume. The city water wells provide drinking water to approximately 14,000 residents in Grants, San Rafael and Milan. The primary contaminant of concern, tetra chloroethene (PCE) has been found at levels up to 51,000 parts per billion (ppb) in the ground water. On July 22, 2004, the Environmental Protection Agency placed the site on the National Priorities List. On June 30, 2006. the EPA signed the Record of Decision. The selected remedy includes mitigation for vapor intrusion and thermal and chemical dechlorination



technologies to address shallow and deep ground water contamination.

Current Status

Full-scale thermal heating began in the source area in early December 2011 and is progressing rapidly. Nearly 60% of the estimated contaminant mass has been removed as of April 2012. First round of

vegetable oil injection in eight transects began in March 2012 and will be completed by end of April 2012. In June 2011, the EPA began construction of the thermal remedy in the source area and completed construction by November 30, 2011. Nearly 33,000 cubic yards of soil is being treated through the thermal remedy. Over 240 thermal probes have been installed in bore holes in the source area. Once thermal remedy is completed additional drilling will completed to install injection wells to treat contamination in the deeper portion of the source area. Major construction activities are scheduled to end by September 2012. In June 2010, the EPA completed the installation of a network of injection and monitor wells at the site to begin treatment of the ground water



plume. The funding for this part of the project was through the the American Recovery and Reinvestment

Act (ARRA) that passed in the US Congress in February 2009. Construction at the site began on October 19, 2009 and was completed by June 2010.

The EPA began construction of Vapor Intrusion Mitigation Systems (VIMS) in affected homes in March 2009 and has completed 100% of the construction work. All of the systems have been verified to meet clean up goals.

On June 30, 2006, the EPA signed the Record of Decision for the Grants Chlorinated Solvents Plume Site. The selected remedy include mitigation for vapor intrusion in buildings above the defined plume and very aggressive thermal and chemical dechlorination technologies to address shallow and deep ground water contamination. The State of New Mexico has provided its support for the selected remedy.

Benefits -

The shallow aquifer at the Site is contaminated with chlorinated solvents such as tetrachloroethene (PCE), trichloroethene (TCE), cis-1, 2 dichloroethene (cis-1,2 DCE) and dichloroethene (DCE). The source materials in the shallow aquifer present risk to residents in the area. These contaminants are migrating through preferential pathways in the soil and presenting risk from vapor intrusion in homes. A more serious concern is the potential for migration of these contaminants in to the deeper San Andreas aquifer, which is the source of the drinking water for the residents of Grants and Milan.

Cleanup of the Site will protect human health and ensure continued source of safe drinking water to the community.

National Priorities Listing (NPL) History _

NPL Inclusion Proposal Date: March 8, 2004 NPL Final Date: July 22, 2004

Location: The Grants Chlorinated Solvents Plume Site is located within the city limits of Grants, Cibola County, New Mexico.

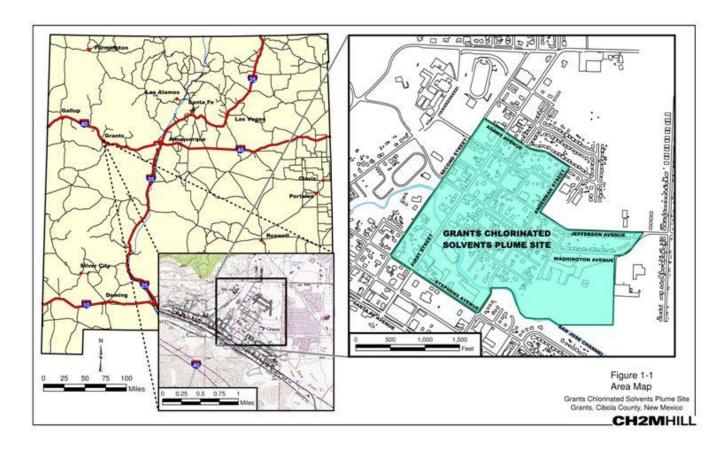
Population: The city water wells located two miles from the site provides drinking water to approximately 14,000 residents in Grants, San Rafael and Milan.

Setting: The contamination is believed to be present in a shallow aquifer underlying residential and commercial facilities within the city of Grants.

Principal Pollutants: The primary contaminant of concern is PCE has been found at levels up to 51,000 parts per billion (ppb) in the ground water. The Maximum Contaminant Level (MCL), or Federal Drinking Water Standard, that is allowed under the Safe Drinking Water Act is 5 ppb.

- Chlorinated solvents are heavier than water and readily sink in ground water. An exact or calculated volume of the chlorinated solvent (PCE) released into the ground water at the Site is unknown at this time. However, very small amounts of these chemicals can contaminate large volumes of soil and ground water.
- The primary media affected by PCE contamination is the ground water, although residual contamination is still found in the soils up to ten feet. Because the contamination is found only in the subsurface, it is safe for people to live, work, in the area affected.
- The drinking water supply wells for the city are located 2 miles north of the site and have not been impacted by the plume.

EPA Publication Date: July 17, 2012



Human Health Considerations

A Baseline Human Health Risk Assessment (BHHRA) has been performed to determine whether site contaminants pose a current or future risk to human health and the environment in the absence of any remedial action. Based on the BHHRA, the Site poses vapor intrusion risk to residents in indoor air. In addition, the soil and ground water is contaminated and poses unacceptable risk to residents.

Record of Decision

A RECORD OF DECISION WAS SIGNED BY EPA ON JUNE 30, 2006

Site Contacts ____

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EPA Site Attorney:

EPA Community Involvement: EPA Region 6 Public Liaison

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